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FILE COVERS 1907 - 27 Sep 2002 VOL 137 ISS 14 FILE LAST UPDATED: 26 Sep 2002 (20020926/ED)

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L1 STR

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Structure attributes must be viewed using STN Express query preparation.

L3 127 SEA FILE=REGISTRY SSS FUL L1

L4 12 SEA FILE=CAPLUS L3

=> d l4 1-12 ibib abs hitstr

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:45042 CAPLUS
DOCUMENT NUMBER: 134:86263
TITLE: 134:86263
INVENTOR(S): Gezing, Ernst R. F.; Kluth, Joachim; Mueller,
Xlaus-Helmut; Drewes, Mark Wilhelm; Dahmen, Peter;
PATENT ASSIGNEE(S): Bayer A.-G., Germany
Ger. Offen., 22 pp.
CODEN: GWXEXX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
FATENT INFORMATION: 1

PATENT INFOR	MATI	ON:															
PATENT	NO.		KI	ND	DATE			A	PPLI	CATI	٥.	DATE					
DE 1993	3260		A	1	2001	0118		D:	E 19	99-1	260	19990715					
WO 2001	0057	88	A	1 20010125		WO 2000-EP6276						20000704					
V:	AE,	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN.	
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	CF,	CG,	CI,	CM,	GΑ,	GN,	G₩,	ML,	MR,	ΝE,	SN,	TD,	TG				
BR 2000	0124	82	A		2002	0402	BR 2000-12482						20000704				
EP 1200	1426		A	1	20021	0502		E	P 20	00-9	4792	5 20000704					
R:	AT,	BE,	CH,	DE,	DX,	ES.	FR,	GB,	GR,	IT.	ĻI,	LU,	NL,	SE,	MC,	PT,	
	IE.	SI.	LT.	LV.	FI.	RO.	MK.	CY.	AL								
PRIORITY APP										1993	3260	Α	1999	0715			
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OTHER SOURCE	OTHER SOURCE(S):			WO 2000-EP6276 W 20000704													
OTHER SOUNCE	.,.,.						OLO	_									

Title compds. [I; Q1, Q2 = 0, S; R1 = (substituted) alkyl, alkenyl, cycloalkyl, aryl, etc.; R2 = H, cyano, NO2, halo, (substituted) alkyl, alkoxy, alkoxycarbonyl, alkylthio, etc.; R3 = H, cyano, OH, SH, amino, cyano, halo, (substituted) alkyl, alkenyl, alkynyl, alkoxy, alkoxy, alkythio, etc.; R4 = H, OH, amino, cyano, alkylidenamino, (substituted) alkyl, alkenyl, alkynyl, alkoxy, etc.; or R7R4 = (branched) alkanediyl], and salts thereof, were prepd. as herbicides (no data). Thus, 5-ethoxy-4-methyl-2-phenoxycarbonyl-2,4-dihydro-3H-1,2,4-triazol-3-one in

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

317815-85-3 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[[4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-[H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (GCI) (CA INDEX NAME)

317815-86-4 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(4-cyclopropyl-4,5-dihydro-3-methoxy-5-oxo-lH-1,2,4-triazol-1-y1)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester
(9CI) (CA INDEX NAME)

317815-87-5 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl}-5-methyl-, methyl ester
(9CI) (CA INDEX NAME)

ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
MeCN was treated portionwise with 4-methoxycarbonyl-2-methylthiophenyl-3sulfonamide (prepn. given) and DBU followed by 12 h stirring to give 60% I
[0] = 02 = 0, Sr RI = R2 = R4 = Mer, R3 = Et]. I were said to show very
strong herbicidal activity combined with good crop tolerance.
317815-82-09 317815-86-4P 317815-84-2P
317815-86-6P 317815-86-4P 317815-93-0P
317815-91-6P 317815-92-2P 317815-93-3P
RIL: AGR (Agricultural use); BAC (Biological activity or effector, except
adverse), BSU (Biological study, unclassified), SFN (Synthetic
preparation), BSU (Biological study), PREP (Preparation), USES (Uses)
(prepn. of thien-3-ylsulfonylamino(thio)carbonyltriazolin(thi)cnes as
herbicides)
317815-92-0 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(3-ethoxy-4,5-dihydro-4-methyl-5-oxo-IH1,2,4-triazol-1-yl)carbonyl]amino[sulfonyl]-5-methyl-, methyl ester (9CI)
(CA INDEX NAME)

317815-83-1 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

317815-84-2 CAPLUS
3-Thiophenecarboxylic acid, 4-[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

317815-88-6 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(4-cyclopropyl-4,5-dihydro-5-oxo-3-propoxy-HH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

317815-89-7 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[[4-cyclopropyl-4,5-dihydro-3-[1-methylethoxy]-5-oxo-IH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

317815-90-0 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(3,4-dicyclopropyl-4,5-dihydro-5-oxo-lH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI)(CA INDEX NAME)

317815-91-1 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(4,5-dihydro-3,4-dimethyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

317815-92-2 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[(3-ethyl-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-5-methyl-, methyl ester (9CI) (CA INDEX NAME)

317815-93-3 CAPLUS
3-Thiophenecarboxylic acid, 4-[[[[4,5-dihydro-4-methyl-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-5-methyl-, methyl ester
(9CI) (CA INDEX NAME)

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:35296 CAPLUS DOCUMENT NUMBER: 132:64260 Preparation of sulfony.

2.1.1.2. CAPLUS
13.64260
Preparation of sulfonylamino(thio)carbonyl-1,2,4-triazol-5-ones as herbicides
Muller, K-helmut; Kluth, J.; Gesing, E. R. F.
Bayer A.-G., Germany
Faming Zhuanli Shenqing Gongkai Shuomingshu, 69 pp.
CODEN: CHXXEV
Patent
Chinese
1 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: P:
LANGUAGE: CI
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

3 A 19980107 3 B 20020724 PATENT NO. APPLICATION NO. DATE CN 1169723 CN 1088063 CN 1996-191629 19960115 OTHER SOURCE(S): MARPAT 132:64260

Title compds. I (Q1, Q2 = 0, S; R1 = alkyl, cycloalkyl, alkoxy, amino, alkenyl, etc.; R2 = alkyl, alkoxy, alkylthio, halo, etc.; R1R2 = alkylene; R3 = Ph, substituted Ph, aralkyl, heteroacyl), useful as herbicides, are prepd. Thus, treaction of 4-methyl-5-methylthio-2,4-dihydrop-3H-1,2,4-triazo-3-one with 3-chlorophenylsulfonyl isocyanate in HeCN in the presence of Et3N gave 2-(3-chlorophenylsulfonylthiocarbonyl)-4-methylthio-2,4-dihydro-3H-1,2,4-triazol-3-one, 2-(2-methyl-5-methylthio-2,4-dihydro-3H-1,2,4-triazol-3-one showed herbicidal activity at 60 g/ha. 180460-12-09

180480-12-0P

RL: AGR (Agricultural use): BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): SPN (Synthetic preparation): BIOL (Biological study): PREP (Preparation): USES (Uses) (prepn. of sulfonylamino(thio)carbonyl-1,2,4-triazol-5-ones as herbicides)

180480-12-0 CAPLUS

2-Thiophenecarboxylic acid, 3-{[[4,5-dihydro-4-methyl-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-yl]thioxomethyl]amino]sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:394187 CAPLUS DOCUMENT NUMBER: 127:5094

TITLE:

INVENTOR (5):

127:5094
N-Heterocyclylcarbonylbenzene- and
-thiophenesulfonamides as herbicides
Mueller, Klaus-Helmut Drewes, Mark Wilhelm;
Findeisen, Kurt; Gesing, Ernst R. F.; Jansen, Johan;
R.; Kirsten, Rolf; Kluth, Joachim; Philipp, Ulrich;
Riebel, Hans-Jochem; Dollinger, Markus; Santel,
Hans-Joachim
Bayer A.-G., Germany
Ger. Offen, 51 pp.
CODEN: GWXXEX
Patent

PATENT ASSIGNEE(S): SOURCE:

Patent

DOCUMENT TYPE: LANGUAGE: German

COUNT:

FAMILY ACC. NUM. CO PATENT INFORMATION:

PA	TENT	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	٥.	DATE	;		
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DE	1954	0737		A:	1	1997	0507			E 19	95-1	9540	737	1995	1102		
	9716																
																110	117
	w:								CZ,	HU,	Jr,	ĸĸ,	K4,	LK,	ΜX,	NO,	NZ,
						TR,											
	RW:	AT.	BE.	CH.	DE.	DK.	ES.	FI.	FR.	GB.	GR.	IE,	IT,	LU,	MC,	NL.	PT.
															TD,		
211	9674																
	8597								Ŀ	P 19	96-9	3 / 20.	4	1996	1021		
EP	8597	74		В:	1	2002	0403										
	R:	DE,	FR,	GB,	ΙT												
BR	9611					1999	0330		E	R 19	96-1	1129		1996	1021		
	1151																
	6180																
	6441																
PRIORIT	Y APP	LN.	INFO	. :											1102		
								1	<i>1</i> 0 1	996-	EP45	59	¥	1996	1021		
								t	JS 1	998-	6638	5	A3	1998	0807		
OTHER S	OURCE	(S):			MAR	PAT	127:	5094									
GT																	

Title compds. I [A = 0, S, (un) substituted NH, CH:N, N:CH, CH:CH: Q = 0, S; Rl = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl: R2 = Cm, No2, halogen, (un) substituted alkyl, alkoxy, alkoxycarbonyl, alkylthio, alkylsulfinyl,

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
190374-13-1# 190379-04-5# BAC (Biological activity or effector, except
adverse): BSU (Biological study, unclassified): SPN (Synthetic
preparation): BIOL (Biological study): PREP (Preparation): USES (Uses)
(prepn. of N-heterocyclylcarbonylbenzene- and -thiophenesulfonamides as
herbicides)
190372-88-4 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-5-oxo-3-(2propynylthio)-IH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-,
ethyl ester (9CI) (CA INDEX NAME)

190372-91-9 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(3-ethyl-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

190372-92-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(methylthio)-5oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester
(9CI) (CA INDEX NAME)

190373-00-3 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-3,4-dimethyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl}amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued) alkylsulfonyl, alkenyl, alkynyl, alkenyloxy, alkynyloxy, R3 - (un) substituted 5-membered heterocycle] and their salts were prepd. Thus, the triazolecarboxylate. II was obtained from the thiophenesulfonamide and the triazolecarboxylate. II has herbicidal activity while being well tolerated by maize and soybeans.
190372-87-3P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SFN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or respent) USES (Uses) (prepn. of N-heterocyclylcarbonylbenzene- and -thiophenesulfonamides as herbicides)
190372-87-3 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[3-ethoxy-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl] amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

0 Me

190372-88-4P 190372-91-8P 190373-02-0P
190373-00-3P 190373-13-8P 190373-11-2P
190373-15-0P 190373-15-1P 190373-11-2P
190373-15-0P 190373-15-1P 190373-17-2P
190373-12-1P 190373-22-9P 190373-22-7P
190373-24-1P 190373-22-9P 190373-23-9P
190373-24-1P 190373-32-76 P 190373-36-7P
190373-34-8P 190373-34-9P 190373-46-3P
190373-48-9P 190373-34-9P 190373-65-3P
190373-55-8P 190373-35-0P 190373-56-3P
190373-55-8P 190373-35-0P 190373-66-3P
190373-66-3P 190373-56-4P 190373-67-2P
190373-71-8P 190373-75-2P 190373-70-7P
190373-77-4P 190373-75-2P 190373-76-3P
190373-77-4P 190373-75-2P 190373-76-3P
190373-77-4P 190373-76-3P 190373-76-3P
190373-77-4P 190373-76-3P 190373-66-3P
190373-80-3P 190373-86-3P 190373-86-4P
190373-80-3P 190373-88-8P 190373-86-4P
190373-91-2P 190373-95-6P 190373-96-1P
190373-91-2P 190373-96-1P 190373-96-1P
190373-91-2P 190373-96-5P 190373-96-1P
190373-91-2P 190373-96-5P 190373-96-2P
190373-91-2P 190374-03-5P 190374-03-2P
190374-08-4P 190374-09-5P 190374-06-2P ΙT

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS INDEX NAME) (Continued)

190373-13-8 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(3-bromo-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

190373-14-9 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropyl-4,5-dihydro-3-(methoxymethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

190373-15-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(3-bromo-4-cyclopropyl-4,5-dihydro-5-oxoH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester
(9C1) (CA INDEX NAME)

190373-16-1 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (SCI) (CA INDEX NAME)

190373-17-2 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[{4,5-dihydro-3-methoxy-4-methyl-5-oxo-lH-1,2,4-triazol-1-y1}carbonyl}amino|sulfonyl]-4-methyl-, methyl ester (9CI)

190373-18-3 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-3-(methoxymethyl)-4-methyl-50x0-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

190373-22-9 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(1-methylethyl)-5-0xo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9C1) (CA INDEX NAME)

190373-23-0 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl}amino]sulfonyl]-4-methyl-, methyl ester (9CI)(CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

190373-19-4 CAPLUS 2-Thiophenecarboxylic acid, 3-{[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H-1,2,4-trizol-1-yl)carbonyl}amino|sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

190373-20-7 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[[3-(ethylthio)-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

190373-21-8 CAPLUS 2-Thiophenecarboxylic acid, 3-{[((4,5-dihydro-4-methyl-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

190373-25-2 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[44,5-dihydro-4-methoxy-5-oxo-3-propyl-1H-1,2,4-triaz01-1-y1)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester [9CI]

190373-26-3 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methoxy-3-(1-methylethoxy)-5-cxo:]+1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester [9CI) (CA INDEX NAME)

190373-27-4 CAPLUS 2-Thiophenecarboxylic acid, 3-[[(3-ethoxy-4-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA INDEX NAME)

¹⁹⁰³⁷³⁻²⁴⁻¹ CAPLUS
2-Thiophenecarboxylic acid, 3-{[[(4-ethoxy-3-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI)
(CA INDEX NAME)

RN 190373-37-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-5-oxo-3-(2-propynylthio)-H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-methyl ester (9C1) (CA INDEX NAME)

RN 190373-38-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-5-oxo-3-(2,2,2-trifluoreethoxy]-iH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-methyl ester (9CI) (CA INDEX NAME)

RN 190373-39-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropyl-4,5-dihydro-3-{1-methyl-thoxy}-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester (9CI) (CA: INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 190373-43-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-44-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{{[(4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethylester (9C1) (CA INDEX NAME)

RN 190373-45-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190373-40-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[(3-ethoxy-4.5-dihydro-4-methyl-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-41-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-42-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-3-methoxy-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190373-46-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-ethoxy-3-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-47-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-5-oxo-3-(2,2,2-trifluoreethoxyl-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-48-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (SCI) (CA INDEX RAME)

Et0

190373-49-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(3-ethoxy-4-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

190373-50-3 CAPLUS

2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-3,4-dimethyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

190373-51-4 CAPLUS
2-Thiophenecarboxylic acid, 3-[[{[3-ethyl-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

190373-57-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[{[[4-cyclopropyl-4,5-dihydro-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

190373-64-9 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(3-ethoxy-4,5-dihydro-4-methyl-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

190373-65-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(3-ethyl-4,5-dihydro-4-methyl-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl]amino|sulfonyl]-4-methyl-, 1-methylethyl ester
(9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

190373-52-5 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methyl-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

190373-53-6 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(1-methylethyl)-5-cxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester
(9CI) (CA INDEX NAME)

190373-55-8 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[44,5-dihydro-4-methoxy-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

190373-66-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[{[[4,5-dihydro-4-methyl-3-{methylthio}-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-,
1-methylethyl ester (9CI) (CA INDEX NAME)

190373-67-2 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[[4,5-dihydro-4-methyl-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

190373-68-3 CAPLUS
2-Thiophenecarboxylic acid, 3-[[(3-ethoxy-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI)(CA INDEX NAME)

RN 190373-69-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{{[[3-(ethylthio)-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl}-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 190373-70-7 CAPLUS
CN 2-Thiophenearboxylic acid, 3-[[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-1H1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester
(9CI) (CA INDEX NAME)

RN 190373-71-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester
(9C1) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

i-Pro-C

RN 190373-75-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[{4-cyclopropyl-4,5-dihydro-3-{1-methylethoxy}-5-oxo-1H-1,2,4-triazol-1-yl}carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 190373-76-3 CAPLUS
CN 2-Thiophenecarboperoxoic acid, 3-[[[4,5-dihydro-3-(methoxymethyl)-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-77-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 190373-72-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]anino|sulfonyl]-4-methyl-,
1-methylethyl ester (9CI) (CA INDEX NAME)

RN 190373-73-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo1H-1,2.4-tciazol-1-yl)carboxyl]amino]sulfonyl]-4-methyl-, 1-methylethyl
ester (9CI) (CA INDEX NAME)

RN 190373-74-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(3-ethoxy-4-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 190373-78-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H
1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI)
(CA INDEX NAME)

RN 190373-79-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[{[[4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190373-80-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(3-bromo-4-cyclopropyl-4,5-dihydro-5-oxo1H-1,2,4-criazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester
(9CI) (CA INDEX NAME)

RN 190373-81-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (SCI) (CA INDEX NAME)

RN 190373-82-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[[((3-ethoxy-4-ethyl-4,5-dihydro-5-oxo-1H1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI)
(CA INDEX NAME)

RN 190373-83-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{[[[3-(ethylthio)-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (SCI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190373-89-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[(4,5-dihydro-3,4-dimethyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190373-90-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{{{(4,5-dihydro-4-methyl-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl)carbonyl}amino}sulfonyl}-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190373-91-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(1-methylethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (SCI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190373-84-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(3-bromo-4-cyclopropyl-4,5-dihydro-5-oxo1H-1,2,4-triazol-1-y])carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl
ester (9C1) (CA INDEX NAME)

RN 190373-85-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{[{{4-cyclopropyl-4,5-dihydro-3-(methoxymethyl)-5-oxo-IH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 190373-87-6 CAPLUS
CN 2-Thiophencarboxylic acid, 3-[[[(4-ethoxy-3-ethyl-4,5-dihydro-5-oxo-lH1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester
(9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 190373-92-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropyl-4,5-dihydro-3-(methoxymethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]smino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190373-93-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropyl-4,5-dihydro-3-[1-methyl-thoxy)-5-oxo-lH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190373-94-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropy]-4,5-dihydro-3(methoxymethyl)-5-cxc-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-95-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[3-bromo-4,5-dihydro-4-methyl-5-oxo-lH-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 190373-96-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(3-bromo-4-cyclopropyl-4,5-dihydro-5-cxo-1H-1,2,4-triazol-1-y1)carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester
(9CI) (CA INDEX NAME)

RN 190373-97-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[(4,5-dihydro-3,4-dimethyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl}-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 190374-02-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[{[(3-bromo-4,5-dihydro-4-methyl-5-oxo-lH1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester
(9CI) (CA INDEX NAME)

RN 190374-03-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-5-oxo-3-[2,2,2-trifulorethoxy]-HH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-,
1-methylethyl ester (9CI) (CA INDEX NAME)

RN 190374-04-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[{[(4,5-dihydro-4-methoxy-5-oxo-3-propyl-1H-1,2,4-tciazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190373-98-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{{{(4,5-dihydro-4-methyl-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl)carbonyl}amino}sulfonyl}-4-methyl-, 1-methylethyl ester
(9CI) (CA INDEX NAME)

RN 190373-99-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-4-methyl-3-(1-methylethyl)-5-oxo-IH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-thylester (9CI) (CA INDEX NAME)

RN 190374-01-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, 1-methylethyl ester (SCI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 190374-05-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

RN 190374-06-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[(4-ethoxy-3-ethyl-4,5-dihydro-5-oxo-lH1,2,4-trizacol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI)
(CA INDEX NAME)

RN 190374-08-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-{[[{3-bromo-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI)(CA INDEX NAME)

190374-09-5 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[{4,5-dihydro-4-methyl-5-oxo-3-{2,2,2-trifluoroethoxy}-iH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

190374-11-9 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methoxy-5-oxo-3-propyl-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-4-methyl-, propyl ester (9CI) (CA INDEX NAME)

190374-13-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(3-ethoxy-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, methyl ester, sodium salt (9C1) (CA INDEK NAME)

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
1397:124917 CAPLUS
126:212152
Preparation of 1-acyl-1,2,4-triazolin-5-ones as herbicides
NULler, Klaus-helmut, Babczinski, Peter; Santel,
Hans-joachim Schmidt, Robert R.; Findeisen, Kurt;
Lindig, Markus; Lurssen, Klaus Strang, Harry
Bayer A.-G., German, Klaus Strang, Harry
U.S., 60 pp., Cont.-in-part of U.S. 5,523,409.
CODEN: USXCAM
DOCUMENT TYPE: Patent
LANGUAGE: Patent
English
FAMILY ACC. NUM. COUNT:
12

APPLICATION NO. DATE

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO.

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US 5061311	A	19911029		US 1988-16882	3	19880316
DE 3934081	A1	19910418		DE 1989-39340	81	19891012
DE 3936622	A1	19910508		DE 1989-39366	22	19891103
DE 3936623	A1	19910508		DE 1989-39366	23	19891103
US 5085684	A	19920204		US 1990-59684	5	19901012
US 5166356	A	19921124		US 1991-74170	2	19910806
US 5149356	A	19920922		US 1991-77782	4	19911015
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US 5380863	A	19950110		US 1993-13642	9	19931013
US 5532378	A	19960702		US 1994-35693	3	19941215
US 5625074	A	19970429		US 1996-63298	4	19960416
US 5750718	Α	19980512		US 1996-72912	6	19961011
PRIORITY APPLN. INFO.	:		DE	1987-3709574	Α	19870324
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			DE	1989-3936622	A	19891103
			DE	1989-3936623	A	19891103
				1990-596845	A3	19901012
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				1991-777824		19911015
			US	1992-868065		19920413
				1992-870867	A3	19920420
				1993-125975		19930923
				1993-136429	A2	19931013
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				1994-356933		19941215
OTHER SOURCE(5): GI	CA	SREACT 126:2	1215	52; MARPAT 126	: 21	2152

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

190379-04-5 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[3-{ethylthio}]-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-4-methyl-, ethyl ester (SCI) (CA INDEX NAME)

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. [e.g., I; R1 = H, (halo) alk(en)yl, alkoxy, etc.; R2 = NR5R6 or SOnR7; R3, R4 = H, (halo) alk(en)yl, alkoxy, aryl, etc.; R5, R6 = (halo) alk(en)yl, alkoxy, aryl, etc.; R7 = (cyclo) alkyl, aryl(alkyl), etc.; X,Y = O or S; n = O·2) were prepd. as herbicides (no data). Thus, MeNHCONNe2 was treated with COC12 and the product condensed with H2NNH2 to give MeN:C (NMe2) NHRH2 which was cyclocondensed with COC12 to give, in 2 addnl. steps, I (R1 = Me, R2 = NMe2, R3 = H, R4 = allyl, X = Y = O). 107914-62-99 187934-63-09 187934-64-1P 107934-65-29
RE: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 1-acyl-1, 2,4-triazolin-5-ones as herbicides)
187934-62-9 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[(4,5-di)hydro-4-methyl-3-(methylthio)-5-oxo-1H-1, 2,4-triazol-1-yl] carbonyl] amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

187934-63-0 CAPLUS
2-Thiophenecatboxylic acid, 3-[[[[3-(ethylthio)-4,5-dihydro-4-methyl-5-oxo-Ik-l_2,4-triazol-1-yl]carbonyl]amino|sulfonyl]-, methyl ester (9CI) (CA

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
187934-64-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[4-cyclopropyl-4,5-dihydro-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-y1]carbonyl]amino]sulfonyl]-, methyl ester (9CI)
(CA INDEX NAME)

187934-65-2 CAPLUS 2-Thiophenecarboxylic acid, 3-{[[[4-cyclopropyl-3-(ethylthio)-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 5 OF 12 CAPLUS COFYRIGHT 2002 ACS (Continued)
(prepn. of N-arylsulfonyl-3-oxo-1,2,4-triazole-2-thiocarboxamides as herbicides)
180480-12-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-3-(methylthio)-5-oxo-1H-1,2,4-triazol-1-yl]thioxomethyl]amino]sulfonyl]-, ethyl ester (9CI)
(CA INDEX NAME)

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
1196:529714 CAPLUS
125:167992
171TLE:
INVENTOR(5):
R. F.; Koenig, Klaus; Dollinger, Markus; Santel,
Hans-Joachim
Bayer A.-G., Germany
Ger. Offen., 44 pp.
CODEN: GWXEX
DOCUMENT TYPE:
PATENT TYPE:
PATENT TYPE:
PATENT INFORMATION:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

OTHER SOURCE(S):

Title compds. [I; R1 = H, OH, NH2, alkyl, aryl, etc.; R2 = H, halo, OH, alkyl, alkoxy, etc.; R1R2 = alkylene; R3 = aryl(alkyl), heteroaryl; X1,X2 = O or S j were prepd. as herbicides (no data). Thus, 4-methyl-methylthio-2,4-dihydro-3H-1,2,4-triazole-3-one was N-acylated by 3-ClCGH4SONCS to give I (R1 = Me, R2 = SMe, R3 = 3-ClCGH4, X1 = O, X2 =

S). 180480-12-0P

RE: AGR (Agricultural use): BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): SPN (Synthetic preparation): BIOL (Biological study): PREP (Preparation): DSES (Uses)

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:524265 CAPLUS
DOCUMENT NUMBER: 125:221848
TITLE: Substituted 5-alkoxy-1,2,4-triazol-3-(thi)ones useful as herbicides.
INVENTOR(S): Mueller, Klaus Helmut, Koenig, Klaus, Kluth, Joachim, Russer, Klaus, Santel, Hans Joachim, Schmidt, Robert R

R. Bayer A.-G., Germany U.S., 69 pp., Cont.-in-part of U.S. 5,356,865. CODEN: USXXAM Patent English 12 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

US 5541337 A 19960730 US 5057144 A 19911015 DE 4030063 A1 19920326 DE 4110795 A1 19921008 US 5094683 A 19920310 US 5241074 A 19930831 US 5245074 A 1995081 US 5356865 A 19941018 US 5356965 A 19950411 US 5532378 A 19960702 US 5537939 A 19950102 US 5537939 B1 20000104 US 5625074 A 19970429 US 5652372 A 19970729 US 5652372 A 19970729 US 5869681 IORITY APPLN. INFO.:	US 1 DE 1 US 1 US 1 US 1 US 1 US 1 US 1 US 1 US	.994-2698 .990-5560 .991-4110 .991-6924 .991-813 .992-3283 .992-3761 .994-3569 .995-3841 .996-6305 .996-6379 .996-63775 337775	52 063 795 39 65 85 6 33 96 69 84 95 69 82 A3	19941215 19950206 19960410 19960425 19970624 19890413 19900720
US 5057144 A 19911015 DE 4030063 A1 19920326 DE 4110795 A1 19921008 US 5094683 A 19920310 US 5241074 A 19930831 HU 219801 B 20010028 US 5356865 A 19941018 US 5352378 A 19960702 US 5352378 A 19960702 US 535486 A 19960702 US 55597939 A 19970128 US 5552574 A 19970722 US 5555773 A 199707429 US 5652372 A 199707429 US 56562372 A 199707429 US 56562372 A 19970020	US 1 DE 1 US 1 US 1 US 1 US 1 US 1 US 1 US 1 US	990-5560 990-4030 991-410 991-6924 991-8163 992-9761 993-3142 994-3569 995-3841 996-6329 996-6329 997-8812 -337775 -556052 -4030063	52 063 795 39 65 85 6 33 96 69 84 95 69 82 A3	19900720 19900922 19910404 19910429 19911230 19920402 19921106 19930315 19941215 19950206 19960410 19960425 19970624 19890413 19900413
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US 5241074 A 19930831 HU 219801 B 20010828 US 5356865 A 19941018 US 5405970 A 19950411 US 5532378 A 19960702 US 5532486 A 19960702 US 5597939 B 19970128 US 5597939 B1 20000104 US 5652372 A 19970429 US 5652372 A 19970429 US 56562872 A 19970029	US 1: US 1:	991-6924 991-8163 999-3283 999-3283 992-9761 993-3142 994-3569 996-6305 996-6329 996-6379 997-8812 -337775 -556052 -4030063	39 65 85 6 33 96 69 84 95 69 B2 A3	19911230 19920402 19921106 19930315 19941215 19950206 19960410 19960425 19970624 19890413 19800413
US 5241074 A 19930831 HU 219801 B 20010828 US 5356865 A 19941018 US 55356865 A 19950411 US 5532378 A 19960702 US 5534486 A 19960702 US 5597939 B1 20000104 US 5597939 B1 20000104 US 5652372 A 19970729 US 5652372 A 19970429 US 56562372 A 19970029 US 56569681 A 19990209	US 1: US 1:	991-8163 999-3283 992-9761 993-3142 994-3569 995-3841 996-6305 996-6379 997-8812 -337775 -556052 -4030063	65 85 6 33 96 69 84 95 69 B2 A3	19920402 19921106 19930315 19941215 19950206 19960410 19960416 19960425 19970624 19890413 19900720
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US 5597939 B1 20000104 US 5625074 A 19970429 US 5652372 A 19970729	US 1: US 1: US 1: US 1: US 1989: US 1990: DE 1991: US 1991:	996-6305 996-6329 996-6379 997-8812 -337775 -556052 -4030063	69 84 95 69 B2 A3	19960410 19960416 19960425 19970624 19890413 19900720
US 5625074 A 19970429 US 5652372 A 19970729 US 5869681 A 19990209	US 1: US 1: US 1989: US 1990: DE 1990: DE 1991: US 1991:	996-6379 997-8812 -337775 -556052 -4030063	95 69 B2 A3	19960425 19970624 19890413 19900720
US 5652372 A 19970729 US 5869681 A 19990209	US 1: US 1: US 1989: US 1990: DE 1990: DE 1991: US 1991:	996-6379 997-8812 -337775 -556052 -4030063	95 69 B2 A3	19960425 19970624 19890413 19900720
US 5869681 A 19990209	US 1989 US 1989 US 1990 DE 1990 DE 1991 US 1991	997-8812 -337775 -556052 -4030063	69 B2 A3	19970624 19890413 19900720
	US 1989 US 1990 DE 1990 DE 1991 US 1991	-337775 -556052 -4030063	B2 A3	19890413 19900720
IORITY APPLN. INFO.:	US 1990 DE 1990 DE 1991 US 1991	-556052 -4030063	A3	19900720
	DE 1990 DE 1991 US 1991	-4030063		
	DE 1991 US 1991		Δ	19900922
	US 1991-			
		-4110/95	A	19910404
		-692439	A3	19910429
		-757785		19911111
	US 1991	-816365	A3	19911230
		-857025		19920324
		-976185		19921106
		-31426		19930315
		-48026		19930415
		-3815765	Α	
		-3934081	Α	
	HU 1992		λ	
		-269875		19940630
		-356933		19941215
		-384196		19950206
		-630569 -716826		19960410
HER SOURCE(S): MARPAT 125:221			B3	19960912

Herbicidal 5-alkoxy-1,2,4-triazol-3-(thi)ones I [Rl = (un)substituted alk(en/yn)yl, cycloalk(en)yl(alkyl), aryl, aryloxy, etc.: R2 = (halo)alk(en/yn)yl, alkoxyalkyl, cyanoalkyl, alkoxy, cycloalkyl(alkyl), R3 - (halo)alk(en/yn)yl, alkoxyalkyl, cyanoalkyl, x1 = 0, S] are disclosed, as well as related herbicidal compds. I [Rl = RaSO2; Ra = (un)substituted alkyl, aralkyl, (hetero)aryl: X = Y = 0], processes for their prepn., their use as herbicides, and new intermediates. Over 500 invention compds. and approx. 35 intermediates are described. For example, cyclocondensation of Ph hydrazinoformate with tri-We iminocarbonate in o-C12CGH4 gave 16% of the intermediate 5-methoxy-4-methyl-2,4-dihydro-3H-1,2,4-triazol-3-one. This reacted with tert-Bu isocyanate in MeCN in the presence of DBU to give 61% title compd. II. In comparison to a known related herbicide from EP-A 314,489, II and several other invention compds. were considerably more active against weeds, with good crop plant compatibility in some cases (no data).
145026-47-7P 145026-59-19 145027-75-4P 145027-75-5P 145027-75-9 P 145027-75-9 145027-80-9 181273-11-0P 181213-19-80 181313-78-0P 181513-78-P 181513-

AL: AGR (Agricultural use): BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): SPN (Synthetic preparation): BIOL (Biological study): PREP (Preparation): USES (Uses) (prepn. of substituted alkoxytriazolones and -thiones as herbicides) 145026-47-7 CAPLUS

2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-3-methoxy-5-oxo-4-propyl-1H-1,2,4-triacol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \parallel \\ \text{MeO-C} \\ \text{s} \\ \hline \parallel \\ \text{s} \\ \text{NH-C} \\ \end{array} \begin{array}{c} \parallel \\ \text{NN} \\ \text{NN} \\ \text{NN} \\ \text{Pr-n} \\ \end{array}$$

145026-59-1 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(3-butoxy-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino[sulfonyl]-, methyl ester (9CI) (CA

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS

145027-78-7 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[3-ethoxy-4,5-dihydro-4-(1-methylethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-79-8 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-3-methoxy-4-(3-methoxypropyl)-5-oxo-lH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-,methyl ester (9CI) (CA INDEX NAME)

145027-80-1 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[(3-ethoxy-4,5-dihydro-5-oxo-4-propyl-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued) INDEX NAME)

145027-75-4 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-76-5 CAPLUS 2-Thiophenecarboxylic acid, 3-{{{(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl}-, methyl ester (9CI) (CA INDEX NAME)

145027-77-6 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[[3-ethoxy-4,5-dihydro-5-oxo-4-(2-propenyl)-HH-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

145027-81-2 CAPLUS
2-Thiophenecarboxylic acid, 3-{{[[4,5-dihydro-3-methoxy-4-(1-methylethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-82-3 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[[4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

181272-95-7 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[[4,5-dihydro-3-{2-methoxyethoxy}-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI)
(CA INDEX NAME)

181273-11-0 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[[4,5-dihydro-4-methyl-3-[2-[1-methylethxy]ethoxy]-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9C1) (CA INDEX NAME)

181273~72-3 CAPLUS 2-Thiophenearboxylic acid, 3-[[[4,5-dihydro-3-methoxy-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

181313-78-0 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[3-ethoxy-4,5-dihydro-4-(1-methylethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, propyl ester (9CI) (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

181314-28-3 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[4-ethyl-4,5-dihydro-3-(2-methoxyethoxy) 5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

181313-79-1 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-y])carbonyl]amino]sulfonyl]-, propyl ester (9CI) (CA INDEX NAME)

181313-87-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-4-methyl-5-oxo-3-phenoxy-lH-1,2,4-triazol-1-y1)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA

181314-08-9 CAPLUS 2-Thiophenearboxylic acid, 3-{{{[3-(2-ethoxyethoxy)-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 12 CAFLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:3322399 CAPLUS
DOCUMENT NUMBER: 125:10830
ITITLE: PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: GERMAN GOLDEN GWXXEX
DOCUMENT TYPE: Patent
LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PA	TENT	NO.		KI	ИD	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
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DE	4435	547		A	1	1996	0411		0	E 19	94-4	43554	17	1994	1005		
WO	9611	188		A	1	1996	0418		W	0 19	95-E	P3768	3	1995	0922		
	W:	AU,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	FI,	HU,	JP,	KR,	KZ,	LK,	MX,	NO,
		NZ.	PL.	RO.	RU.	SK.	UA.	US									
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT.	LU,	MC,	NL,	PT,	SE,
		BF.	BJ,	CF,	CG,	CI,	CH,	GA,	GN,	ML,	MR,	NE.	SN,	TD,	TG		
AU	9536	526		À	1	1996	0502		À	บ 19	95-3	6526		1995	0922		
EP	7846	16		A	1	1997	0723		E	P 19	95-9	3410	7	1995	0922		
	R:	BE.	CH.	DE.	ES.	FR.	GB.	IT.	LI,	NL							
CN	1168	668		Ä		1997	1224		ċ	ท 19	95-1	9656	5	1995	0922		
JP	1050	8298		T	2	1998	0818		J	P 19	95-5	1228	5	1995	0922		
PRIORIT	Y APP	LN.	INFO	. :					DE 1	994-	4435	547		1994	1005		
								1	WO 1	995-	EP37	68		1995	0922		
OTHER S	OURCE	(S):			MAR	PAT	125:	1083	0								

GI

Title compds. (I, R = CONHSO2R3) (II, R1 = H, (cyclo) alk(en)yl, alkynyl, aryl(alkyl); R2 = (cyclo) alk(en)yl, alkynyl, aryl(alkyl); cycloalkylalkyl; R3 = (ar) alkyl, (hetero) aryl; n = 0-2) were prepd. as herbicides (no data) and agrochem. fungicides. Thus, HZPMNCONMOEK (prepn. given) was acylated with C1C(:S)OPh and the cyclized product 5-methylated to give I (R = H, R1 = OEt, R2 = Me, n = 0). Similarly prepd. I (R1 = R2 = Et, n = 0) (II; R = H) was condensed with 2-(MeOZC)CGH4SOZNCO to give II (R = 2-MeOZC)CGH5SOZNHCO) which gave complete control of Venturia inaequalis on apple seedlings at 10ppm.
177175-42-7
RE: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of N-(sulfonylcarbamoyl)triazolinones as herbicides and agrochem. fungicides)
177175-42-7 CAPIUS
2-Thiophenecarboxylic acid, 3-[{[3-(ethylthio)-4,5-dihydro-4-methory-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI)
(CA INDEX NAME)

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl or aralkyl; R2 =
optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl
or aralkyl; R3 = optionally substituted alkyl, aralkyl, aryl and
heteroaryl) having 2 substituents bonded via oxygen, and their salts, are
herbicides. Pre= and post-emergence herbicidal activity was demonstrated.
148703-89-3 148704-01-2 148704-24-9
RE: AGR (Agricultural use); BAC (Biological activity or effector, except
adverse); BSU (Biological study, unclassified); BIOL (Biological study);
USES (Uses)
(herbicide)
148703-89-3 CAPLUS
2-Thiophenecarboxylic acid, 3-[[(3-ethoxy-4,5-dihydro-4-methoxy-5-oxo-1H1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA
INDEX NAME)

148704-01-2 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-3,4-dimethoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

148704-24-9 CAPLUS
2-Thiophenecarboxylic acid, 3-{[[(4-ethoxy-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:403299 CAPLUS
DOCUMENT NUMBER: 121:3299
TITLE: Herbicidal sulfonylaminocarbonyltriazolinones having
two substituents bonded via oxygen
two substituents bonded via oxygen
Haas, Wilhelm: Hueller, Klaus Helmut, Koenig, Klaus,
Santel, Hans Joachim; Luersen, Klaus, Schmidt, Robert
R.

PATENT ASSIGNEE(S): SOURCE:

R. Bayer A.-G., Germany U.S., 24 pp. Cont.-in-part of U.S. Ser. No. 31,426. CODEN: USXXAM Patent English 12

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION N	10.	DATE
US 5300480	λ	19940405		US 1992-94519		19920915
US 5057144	λ	19911015		US 1990-55605		19900720
US 5094683	A	19920310		US 1991-69243		19910429
US 5241074	A	19930831		US 1991-81636		19911230
US 5405970	A	19950411		US 1993-31426		19930315
US 5488028	A	19960130		US 1993-17449		
US 5532378	A	19960702		US 1994-35693		
US 5554761	A	19960910		US 1995-54769		
US 5625074	A	19970429		US 1996-63298		
US 5631380	A	19970520		US 1996-64499		
RIORITY APPLN. INFO).:			1989-337775		
			US	1990-556052	A3	19900720
			US	1991-692439	A3	19910429
			US	1991-816365	A2	19911230
			US	1993-31426	A2	19930315
			DE	1988-3815765	Α	19880509
			DE	1988-3815769	Α	19880509
			DE	1989-3934081	A	19891012
			DE	1991-4131842	Α	19910925
			US	1992-945194	A3	19920915
			US	1993-174495	A3	19931228
			US	1994-356933	A3	19941215
			US	1995-547698	A3	19951019
THER SOURCE(S):	MA	RPAT 121:32	99			

Sulfonylaminocarbonyltriazolinones (I; R1 = H or an optionally substituted

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS

L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
119:117257 CAPLUS
119:1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 534266	A1	19930331	EP 1992-115698	19920914
EP 534266	B1	19970528		
R: BE, CH,	DE, ES	, FR, GB, IT,	LI, NL	
DE 4131842	A1	19930401	DE 1991-4131842	19910925
ES 2102433	т3	19970801	ES 1992-115698	19920914
JP 05213907	A2	19930824	JP 1992-273803	19920917
JP 3164913	B2	20010514		
CA 2078811	AA	19930326	CA 1992-2078811	19920922
BR 9203729	A	19930420	BR 1992-3729	19920924
PRIORITY APPLN. INFO	. :		DE 1991-4131842 A	19910925
OTHER SOURCE(S):	MA	RPAT 119:1172	57	
GI				

The prepn. of title compds. I (Rl = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aralkyl; R2 = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aralkyl; R3 = alkyl, aralkyl, aryl, heteroalkyl) as herbicides is claimed.
148703-89-39 148704-01-2P 148704-24-99
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and herbicidal activity of)
148703-89-3 CAPLUS
2-Thiophenecatoxylic acid, 3-[[[3-ethoxy-4,5-dihydro-4-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME) ΙT

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:38929 CAPLUS
118:38929 CAPLUS
128:38929 CAPLUS
118:38929 CAPLUS
118:38929

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATE	NT NO.						PLICATION N	о.	DATE
						EP	1992-10497	1	19920323
	07171								
	R: BE,	CH, D	E, DK,	ES, FR,					
DE 4	110795		A1	19921008		DE	1991-41107	95	19910404
AU 9	110795 212189		A1	19921008		ΑU	1992-12189		19920310
AU 6	58862		B2	19950504					
ES 2	108056		Т3	19971216		ES	1992-10497	1	19920323
JP 0	5194433		A2	19930803		JP	1992-10250	9	19920330
				20020304					
CA 2	064636		AA	19921005		CA	1992-20646	36	19920401
CA 2	064636		С	19971223				-	
HU 6	1532		A2	19930128		HU	1992-1114		19920402
HU 2	17350		В	20000128					
HU 2	19801		В	20010828		ни	1999-3283		19920402
BR 9	201207		Ā	19921201			1992-1207		
	597939			19970128			1996-63056		
	597939			20000104			1330 03000	-	13300110
	869681					110	1997-88126		10070624
PRIORITY			^				1-4110795		
INIONIII	AFFLIN.	MFO					92-857025		
							92-857025		
									19920402
							3-48026		
					US	199	5-384196	A3	19950206
							6-630569		
						199	96-716826	В3	19960912
OTHER SOU	RCE(S):		MAP	PAT 118:3	18929				

Title compds. [I: Rl = H, amino, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aralkyl, aryl: R2 = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl, aralkyl, aryl: R3 = (substituted) alkyl, aralkyl, aryl, heteroaryl], were prepd. as hethicides (no data). Thus, 4-methyl-5-phenoxy-2,4-dihydro-3H-1,2,4-triazol-3-one and

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)

148704-01-2 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[(4,5-dihydro-3,4-dimethoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino|sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

148704-24-9 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4-ethoxy-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
2-Mec2CCGH4SOZNCO were stirred 6 h in MeCN to give 90% title compd. II.
Several I were said to show superior pre- and postemergence herbicidal
activity and to be well-tolerated by crop plants.
145026-31-9P 145027-76-5P 145027-77-69
145027-78-4P 145027-76-5P 145027-77-69
145027-78-P 145027-78-9P 145027-80-1P
145027-91-2P 145027-78-3P
RL: AGR (Agricultural use): BAC (Biological activity or effector, except
adverse): BSU (Biological study, unclassified): SPN (Synthetic
preparation): BIOL (Biological study): PREF (Preparation): USES (Uses)
(prepn. of, as herbicide)
145026-31-9 CAPLUS
2-Thiophenecarboxylic acid, 3-[[(3-ethoxy-4,5-dihydro-4-methyl-5-oxo-1H1,2,4-teiazol-1-yl)carbonyl]amino)sulfonyl]-, methyl ester (9CI) (CA
INDEX NAME)

145026-47-7 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-3-methoxy-5-oxo-4-propyl-lH-1,2,4-triacol-l-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145026-59-1 CAPLUS
2-Thiophenecarboxylic acid, 3-{{{(3-butoxy-4,5-dihydro-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl}carbonyl}amino|sulfonyl}-, methyl ester (9CI) (CA INDEX NAME)

145027-75-4 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-3-ethoxy-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

2-Thiophenecarboxylic acid, 3-{[[(4-ethyl-4,5-dihydro-3-methoxy-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino|sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \left\| \right\| \\ \left\| \right\| \\$$

145027-77-6 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[3-ethoxy-4,5-dihydro-5-oxo-4-{2-propenyl}-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9C1) (CA INDEX NAME)

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS

145027-81-2 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-3-methoxy-4-(1-methylethyl) 5-oxo-lh-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-82-3 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-methyl-3-(1-methylethoxy)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9C1) (CA INDEX NAME)

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS

145027-78-7 CAPLUS 2-Thiophenecarboxylic acid, 3-[[[[3-ethoxy-4,5-dihydro-4-(1-methylethyl)-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-79-8 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[[4,5-dihydro-3-methoxy-4-{3-methoxypropyl}-5-oxo-1H-1,2,4-triazol-1-yl]carbonyl]amino}sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

145027-80-1 CAPLUS 14302:-80-1 CAPLUS
2-Thiophenecarboxylic acid, 3-{{{(3-ethoxy-4,5-dihydro-5-oxo-4-propyl-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
115:114509 CAPLUS
115:114509
Preparation of 2-(sulfonylaminocarbonyl)-2,4-dihydro-3H-1,2,4-triazol-3-ones as herbicides
Mueller, Klaus Helmut: Babczinski, Peter; Santel, Hans Joachim, Schmidt, Robert R.
PATENT ASSIGNEE(S):
BOURCE:
COUENT TYPE:
LANGUAGE:
PAHILY ACC. NUM. COUNT:
12

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	CENT N	ю.		KI	ND I	DATE			1				ION	NO.	DAT	E	
EP	42594	8		A	2	1991	0508		1						199	01020)
EP	42594	8		A:	3	1991	1009					-					
	42594						1213										
	R:	BE.	CH,	DE.	DX.	ES.	FR.	GB.	IT.	. 1	J.	NL					
DE	39366													622	198	91103	•
AU	90636	02		A1	1 1	1991	0509		1	ΑU	199	0-	6360	2	199	00927	1
	62328																
EP	66126	2		A1	1 1	1995	0705		1	EΡ	199	95-	1018	33	199	01020	,
EP	66126	2		В1	1 1	1998	0923										
	R:	BE,	CH,	DE,	DK,	ES,	FR,	GB,	IT,	, [ı,	NL					
ES	20813	34		Т3	3]	1996	0301		Ī	ES	199	0-	1201	52	199	01020	,
ES	21212	40		Т3	3 :	1998	1116		1	ES	199	5-	1018	33	199	01020	,
JP	03153	674				1991	0701			JΡ	199	0-3	2886	04	199	01029	,
JP	29656			B2			1018										
CA	20291	0.5		A/	١ 1	1991	0504		(Zλ	199	0-:	2029	105	199	01101	
BR	90055	70		A	1	991	0917		3	BR	199	0-	5570		199	01101	
	90087			A												01102	
	52389			A	1	1993	0824		ι	JS	199	92-1	9592	16	199	20327	1
US	53808	64		A	1	995	0110		ι	JS	199	3-6	5007	5	199	30510	,
PRIORITY	APPL	Ν. :	INFO.	:					DE 1	198	9-3	193	5622	A	198	91103	ı
													900			00911	
													152			01020	
										199	12-8	1592	216	A3	199	20327	1
OTHER SO	OURCE (5):			MARI	AT	115:	11450	9								

Title compds. [I: Rl = H, OH, amino, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, acalkyl, aryl, alkowy, alkenyloxy, alkylamino, cycloalkylamino, dialkylaminon R2 = halo: R3 = alkyl, aralkyl, aryl, heteroaryl], were prepd. as herbicides (no data). Thus, 5-chloro-4-dimethylamino-2,4-dihydro-3H-1,2,4-triazol-3-one (prepn.

- ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued) starting from di-Ph carbonate and Me2NNH2 given) and 2-methoxycarbonyl phenylsulfonyl isocyanate were stirred 6 h at 20.degree. in MeCN to give title compd. II. Several I were said to be superior pre- and postemergent herbicides.
 135692-71-6P
 RL: AGR (Agricultural use), BAC (Biological activity or effector, except adverse), SPN (Synthetic preparation), BIOL (Biological study), PREP (Preparation), USES (Uses) (prepn. of, as herbicide)
 135692-71-6 CAPLUS
 2-Thiophenecarboxylic acid, 3-[[(3-chloro-4-cyclopropyl-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino|sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

$$\begin{array}{c}
\downarrow \\
N = \downarrow \\
N = \downarrow \\
R^2 \qquad I
\end{array}$$

The title compds. [I; R1 = H, HO, amino, (un)substituted (cyclo)alkyl, (di)alkylamino, alkenyl(cmy), alkynyl, alkowy, aryl(alkyl); R2 = H, HO, HS, amino, (un)substituted (cyclo)alkyl, aryl, (di)alkylamino, etc.; R = R3502NHCO; R3 = (un)substituted (cyclo)alkyl, aryl, (di)alkylamino, etc.; R = R3502NHCO; R3 = (un)substituted (cyclo)alkyl, cycloalkenyl, alkowy, (di)alkylamino, aryl(alkyl), heteroaryl] (II) and their salts, were prepd. as herbicides (no data), e.g., by amidation of trizaolinones I; R = COZ; Z = halo, (ar)alkowy, aryloxy) with sulfonamides R3502NH2. Also claimed are I [R = H; R1 = (un)substituted (cyclo)alkyl, alkowy, aralkyl; R1 = noteq, R2 = H]. Thus, I. 8 g D81 were added to a stirred mixt. of 3.0 g 5-ethyl-4-methyl-2-phenoxycarbonyl-2,4-dihydro-HH-1,2,4-trizaol-2-one and 2.5 g 2-chloro-6-methylbenzenesulfonamide in 60 mL McCN, and the whole stirred 2 h at 20.degree. to give 3.2 g title compd. (I; R = 2,6-CLMeGH3502NHCO, R1 = Me, R2 = Et). Over 100 II were prepd. in the systemic and protective activity against Pyricularia on rice of several I expressed in qual. terms.
135:280-45-4p 135:280-50-1P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as herbicide)
135:280-45-4 CAPUS
2-Thiophenecarboxylic acid, 3-{{([4-cyclopropyl-3-ethyl-4,5-dihydro-5-oxo-1H-1,2,4-trizaol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

135280-50-1 CAPLUS
2-Thiophenecarboxylic acid, 3-[[[(4-cyclopropyl-4,5-dihydro-5-oxo-3-propyl-1H-1,2,4-t-trizzol-1-yl)carbonyl]amino]sulfonyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:471618 CAPLUS
115:71618
115:71618
115:71618
115:71618
Preparation of sulfonylaminocarbonyltriazolinones as herbicides
Mueller, Klaus Helmut; Babczinski, Peter; Santel, Hans Jacchim; Schmidt, Robert R.
Bayer A.-G., Fed. Rep. Ger.
EUR. PATENT INFORMATION: EPXKDW
Patent INFORPMATION: 12
PATENT INFORPMATION: 12 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE BR 1990-5095 19901011
C2 1990-4950 19901011
SK 1990-4950 19901011
US 1994-356933 19941215
US 1996-632984 19960416
DE 1988-38415765 A 1980509
US 1989-337775 B2 19890413
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EP 1990-118750 A3 19900229
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US 1994-356933 A3 19941215

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

MARPAT 115:71618

OTHER SOURCE(S):